

5 IMPLEMENTATION



The successful implementation of the Alewife master plan will require numerous resources and approaches and the commitment of both the public and private sectors. The following implementation plan describes the variety of strategies and mechanisms that will need to be employed to achieve the plan's goals. The complexity of the implementation plan and the need to coordinate with federal and state funding agencies make it difficult to predict, with any accuracy, when implementation will be fully realized. However, as indicated in implementation phasing, there are actions the City can begin to work on immediately to advance the plan, together with a logical sequencing of the implementation strategies.

ENVIRONMENT AND OPEN SPACE

Open space implementation is approached on two levels; area-wide recommendations are made for how additional open space can be promoted, and area-specific plans are suggested for enhancing existing open space resources. It is anticipated that new open space and creation of a landscaped pedestrian network in Alewife will result from a combination of public and private sector initiatives.

AREA-WIDE IMPLEMENTATION TOOLS

Public Funding Sources

At the time of this writing, there is unfortunately not a great deal of public money dedicated to open space acquisition and construction. There are some state and federal programs in place to which we can look, particularly with the hope of finding greater possibilities in the years to come.

① **Urban Self-Help Program.** This program, administered through the Massachusetts Department of Environmental Affairs, provides funds for open space acquisition.

② **Land and Water Conservation Fund.** The Land and Water Conservation Fund Program provides money for open space construction. The Program is funded with federal dollars and is administered by the Massachusetts Department of Environmental Affairs.

③ **Urban Parks and Recreation Recovery Program.** This program also provides funds for park construction and is administered by the National Park Service.

④ **ISTEA.** There may be some possibility to finance open space improvements of trails and paths, acquisition of scenic easements and scenic sites, and landscaping and other scenic beautification through the federal Intermodal Surface Transportation Efficiency Act of 1991.

Zoning mechanisms

① **Requirements.** New construction can be required to have a certain amount of open space on the property. This would be particularly relevant for setbacks and portions of the lots that are not built on, in that there can be requirements for landscaping, etc.

② **Incentives.** Zoning incentives can also be used to encourage property owners to develop public open space areas, or allow property easements. For example, additional FAR may be allowed for certain public open space donations or development. Another mechanism is the transfer of development rights, whereby a property owner donates a portion of land to the City but can maintain the “development rights” of that parcel and transfer them to another parcel or portion of property. These incentives could be used for pocket parks, open sitting areas, or open space easements that connect larger existing open space areas together (e.g. from Blair Pond to the Alewife Reservation).

③ **Design Guidelines.** Design guidelines can also be used as motivation to enhance private property, particularly with green edges and additional landscaping.

Public/Private partnerships

Public/private partnerships have proved very successful in other areas of Cambridge (e.g. East Cambridge Riverfront) and in other cities to achieve substantial open space improvements.

AREA SPECIFIC PLANS

Route 2/Alewife Reservation

The MDC has indicated that they will create a major new master plan for the Alewife Reservation. The City will support and participate in this process, maintaining particular attention to the Alewife Steering Committee's open space and environmental goals. Part of the master plan process should be investigating the feasibility and possible siting of an Interpretive Center.

Triangle

❶ Reservation edge. Upgrading the reservation edge should be addressed both through the MDC master planning process and by developing design guidelines and zoning tools to ensure that future additions or changes to the built environment strengthen the edge.

❷ Jerry's Pond. The current owner/developer has committed to upgrading the site. Should this not occur, it may be possible for the MDC to acquire and maintain Jerry's Pond (provided there are available funds and there is a commitment for maintenance).

Quadrangle

❶ Blair Pond. Blair Pond should be rezoned with an Open Space designation to reflect its current and future status as a significant open space resource. The City supports and encourages the ongoing activities of the MDC, the Cambridge Highlands Neighborhood, and the Friends of Blair Pond groups in their efforts to clean and upgrade this important resource. In 1993 the MDC received an \$80,000 grant to conduct a complete study of Blair Pond and the related Wellington Brook; some of the funds will also be used for site work needed to protect the pond from further degradation.

❷ Michael J. Rafferty Playground. As the primary local recreational area for the Cambridge Highlands Neighborhood, Rafferty Playground should be rezoned to Open Space. Rehabilitation of the facility is scheduled for 1994, and is funded through the Cambridge Highlands Stabilization Program.

❸ Fresh Pond. The Community Development Department will work with the Water Department and other members of the Fresh Pond Management Group to develop the Fresh Pond Master Plan to improve and enhance Fresh Pond Reservoir. This will involve coordinating the upgrading and clearing of the edge, including new fencing, especially along Concord Ave., and developing a plan and capital improvement strategy to provide pedestrian and/or visual access to the Fresh Pond Reservation at Smith Place.

④ New Open Space. Opportunities for acquisition of new public open space will be sought in the Quadrangle and throughout the entire Alewife area. Guidelines will be developed to determine the appropriate size, type and character of any new open space. Possible tools to acquire new public open space include a zoning mechanism to allow for a transfer of development rights to acquire new open space, public/private partnerships, and public acquisition.

TRANSPORTATION

The transportation improvement program for the Alewife Area will focus on reducing automobile use and conversely promoting alternatives to the single occupant vehicle as mandated by the requirements of the Cambridge Vehicle Trip Reduction Ordinance adopted by the City Council in June of 1992. Thus, roadway improvements are restricted to those which will improve safety, provide for better transit and shuttle bus connections, improve emergency vehicle access, and allow for better bicycle and pedestrian circulation.

ROADWAY IMPROVEMENTS BY PRIORITY

① Reconstruct the Smith Place/Concord Avenue Intersection. Upgrading this substandard and dangerous intersection has the highest priority. The right-of-way for Smith Place is only 33 feet wide at this unsignalized intersection and connects with Concord Avenue at an acute angle resulting in very difficult turning movements, especially for trucks.

② Eliminate the dead end roadways in the Quadrangle. New roads should be built to connect Moulton Street and Spinelli Place to Smith Place in order to eliminate the “dead ends” and improve emergency vehicle access. The right-of-way for the Moulton Street connection now exists to be used as Wilson Road.

③ Rebuild the two Concord Avenue Rotaries. The MDC should replace the rotaries with signalized intersections that would provide safer bicycle and pedestrian crossings of Concord Avenue.

④ Reconstruct Concord Avenue from Alewife Brook Parkway to the Belmont town line. This deteriorating roadway should be rebuilt in a way that will improve bicycle and pedestrian safety as well as enhance the visual image of the area.

⑤ Rebuild Fawcett Street from Smith Place to the abandoned railroad spur and provide curbing and sidewalks. These improvements are required for safe pedestrian circulation.

⑥ Complete CambridgePark Drive. When CambridgePark Drive was constructed a decade ago, the required right-of-way was donated to the city except for one small stretch near the Alewife MBTA Station. The city has since acquired this land which now enables the roadway to be completed.

⑦ Preserve a right-of-way to connect Moulton Street to the new roadway under the Alewife Brook Parkway Truss Bridge. Although not critical at this time, every effort should be made to establish and preserve this right-of-way for a future connection from the Quadrangle to the Fresh Pond Shopping Area. This would remove local traffic from the MDC’s Parkway System.

⑧ Coordinate signal timing between MDC owned roads such as Alewife Brook Parkway and City owned roads such as Concord Avenue. The City and the MDC should work together to coordinate all traffic signals along Alewife Brook Parkway in order to organize traffic flow in a manner consistent with the parkway character of the corridor while at the same time recognizing the need for access to the Alewife area.

TRANSIT IMPROVEMENTS AND PROMOTION OF NEW TRANSPORTATION MODES

In order to carry out the transit improvements and encourage alternative fuel vehicles as outlined in the Transportation Recommendations, the following should be done:

- ❶ The City should pursue funding in order to create a link between Smith Place and CambridgePark Drive across the Fitchburg Mainline Railroad right-of-way.
- ❷ The City should work together with public and private entities to create a regular shuttle bus service connecting primary destination points in the Alewife Area.
- ❸ The MBTA should expand and improve the feeder bus network to the Alewife Station.
- ❹ The MBTA and the MHD should construct parking facilities along Route 128 and beyond with shuttle buses running to Alewife Stations.
- ❺ The City should work with the MBTA and Spaulding and Slye, Inc. to ensure construction of the new commuter rail station. Due to the MBTA's concerns with the cost of the facility and competition from other projects for limited public dollars, the commuter rail station is not currently a high priority on the MBTA project list. The City will need to play an advocacy and coordination role to move this important project forward in the future.
- ❻ The City should investigate how electric and other alternative fuel vehicles can be accommodated and encouraged for commuter and intracity transportation.

TRANSPORTATION DEMAND MANAGEMENT

Each employer in the Alewife area should be encouraged to implement all or at least some of the following vehicle trip reduction techniques:

- ❶ Join with other employers to form a Transportation Management Association to implement traffic mitigation measures collectively.
- ❷ Promote the use of public transportation by providing up to date maps, schedules and transit information, establishing an MBTA Pass sales office, subsidizing employee "T" Passes, and making reference to transit facilities and proximity in appropriate marketing and advertising materials.
- ❸ Utilize a computer based ride sharing program to match employees for car and van pools, collect and disseminate ride sharing information, and share information with other organizations and companies where possible.
- ❹ Encourage staggered or flexible work hours for employees.
- ❺ Establish parking management techniques such as providing preferential parking spaces and reduced rates for van and car pools.
- ❻ Consider the joint use of parking facilities to maximize the effectiveness of parking management programs.
- ❼ Operate a shuttle system or join with and expand an existing system, e.g. CambridgeSide Galleria, to serve and make public transit more accessible.
- ❽ Provide sufficient covered and secure bicycle racks.
- ❾ Consider cooperating to provide innovative services, such as day care, courier and copy services, shower and locker room facilities, and shuttles to airports.

⑩ Work with the City's Transportation Demand Manager, operating out of the Cambridge Environmental Program, to facilitate the implementation of a program for Alewife.

BICYCLE/PEDESTRIAN PROGRAM

The implementation program for bicycle and pedestrian improvements in Alewife falls under two general categories, the first being the city-wide Bicycle/Pedestrian Mobility Program and the second being specific improvements for the Alewife area.

Bicycle/Pedestrian Mobility Program

The 1992 Vehicle Trip Reduction Ordinance established several measures designed to reduce the number of single-occupancy automobile trips taken in Cambridge and to promote other forms of transportation, including walking and bicycling. Elements of the program include designating a City Bicycle/Pedestrian Mobility Coordinator and a Bicycle/Pedestrian work program, components of which are: development of a Cambridge Bicycle Master Plan, development of a Cambridge Pedestrian Master Plan, development and evaluation of recommendations for a regional network of bicycle paths and bicycle priority streets favoring both bicycles and pedestrians, consultation with Cambridge residents, businesses, institutions and property owners, funding of bicycle amenities and storage facilities, funding for pedestrian amenities, and provision of bicycles for use by the City Police's and Traffic and Parking Departments.

There is also a city Bicycle Committee that comprises Cambridge citizens and representatives from various City departments, which is working to implement the Bicycle program.

Work that is underway or planned for Alewife includes:

① Bicycle parking facilities. The Bicycle Coordinator and the Committee have selected appropriate bicycle parking facilities and set standards for the placement of those facilities. They are also currently creating a plan for desired placement areas throughout the City, some of which will be located in the Alewife area.

② **Routes.** There are several existing or designated bicycle paths and routes which are either in or access the Alewife area, but do not necessarily connect with each other, and therefore are incomplete and represent a lost opportunity. Specifically in the Alewife area proper, the Minuteman Bikeway, Linear Park, the Fitchburg Freight Track(along the southern portion of the Alewife Reservation), and the soon-to-be constructed bicycle path from Rindge Ave. to the Concord Ave. rotary along Alewife Brook Parkway all represent significant facilities. These do not connect with one another. Important facilities nearby include Fresh Pond Reservoir and Danahy Park. The Committee is working with relevant public entities to make these improvements and connections.

Funding sources for the implementation of the bicycle/pedestrian elements of the Alewife Master Plan are being investigated. The federal Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) holds promise, but is more likely to be accessed in the longer term. Some improvements will be made by the private sector as redevelopment takes place, and improvements to sidewalks and premises are made. The Bicycle/Pedestrian Program itself has a small budget, which may be used to leverage other larger funding sources.

Physical Improvements in Alewife

① **Overlay District/Urban Design.** As part of the new overlay district, new and renovated buildings will have certain urban design requirements. These will include requirements for improved pedestrian facilities, e.g. sidewalks, landscaping, lighting, etc. If a project involves any street improvements, requirements as to bicycle-friendly design will also be made.

The new overlay district also proposes that the transfer of development rights zoning tool be used as an incentive to gain additional public open space; this tool can also be used to gain rights-of-way for bicycle and pedestrian access through otherwise private property (e.g. in order to access the Alewife Reservation more directly). Public open space facilities are also considered a major pedestrian amenity. Other creative proposals should also be encouraged and considered by the reviewing board.

② **Bicycle parking facilities.** Under the current zoning guidelines, when a new automobile parking lot or structure is built, bicycle parking facilities are required at a ratio of one bicycle space per ten car spaces. Proposed is that bicycle parking facilities be approved by the Bicycle/Pedestrian Coordinator regarding type and placement of the racks.

③ **Review process and standards for new roads.** A process for reviewing new road projects in terms of their suitability for bicycling and pedestrian facilities is being established for the City. Any new projects will be reviewed by the Bicycle Committee and the Bicycle/Pedestrian Coordinator. The Committee and the Coordinator are looking at appropriate standards for bicycle and pedestrian facilities for new roads.

④ Minuteman-Charles River Connector. Under ISTEA, funding was established to create a bicycle connection from the Minuteman Bikeway to the Paul Dudley White bicycle path along the Charles River. Responsibility for this project rests with the Massachusetts Highway Department, and is in the study phase. While the exact route has not been established, it is anticipated that this will traverse the Alewife area and will provide greatly improved conditions for bicyclists.

⑤ Alewife Brook Parkway/Truss Bridge Replacement. In the summer of 1993, the MDC and Mass. Highway Department began major improvements to Alewife Brook Parkway between Rindge Ave. and the Alewife Brook Parkway/Concord Ave. rotary (at the Ground Round restaurant) that will include an entire replacement of the existing truss bridge. The new road will have wide sidewalks, bicycle travel lanes, a landscaped median, and major landscaping along the edges of the parkway. These changes represent major improvements for bicycles and pedestrians, and should be continued along the length of Alewife Brook Parkway.

HOUSING

Opportunities for new housing are very limited, due to the constraints of existing land uses, other goals of the Alewife Master plan, and availability of locations appropriate for housing. However, a few areas, located along Concord Avenue both east and west of Fresh Pond Parkway, do provide potential for new housing in the future. Because of the limitations within the study area and the ideal of developing housing by expanding existing residential areas, sites along the outskirts of the study area are identified for further analysis. As all the sites identified for potential housing development are privately owned, it is anticipated that any future housing development will be undertaken by the private sector.

Zoning and urban design guidelines are the implementation tools proposed to achieve housing of a scale and character that will strengthen and complement the existing residential edges.

STUDY AREA SITES

The areas that appear to be the most appropriate within the study area for future housing development are along the Concord Avenue edge (west of Fresh Pond Parkway) and, for the longer term, at the Fresh Pond Shopping Center site.

Concord Avenue edge (west of Fresh Pond Parkway)

This stretch of land, located along Concord Avenue directly across from the Fresh Pond Reservation, includes a mix of housing, office and commercial uses. This mix is appropriate. Additional infill housing would build upon the residential character of the Cambridge Highlands neighborhood. Institutional uses, such as a continuing care retirement community or a nursing home, seem appropriate for the Sancta Maria Hospital site. Such uses would serve an important community need and act as an appropriate transition between the Highlands and new development along Concord Avenue and in the Quadrangle.

The current Office 2 zoning designation allows for housing by special permit; in fact a special permit to build 32 units of housing on Concord Avenue, across from Neville Manor, was recently renewed by the Planning Board. The special permit process will ensure that new projects reflect the urban design guidelines for the area and improve the entryway into the city from Belmont.

Fresh Pond Commercial Area

This area is currently used as retail and commercial, although housing is a permitted use. In the longer-term, the Fresh Pond Shopping Center site is likely to redevelop in a significant fashion, and at that point, consideration should be given to including a housing component. The zoning structure can provide incentives for that to occur, e.g., with a decreased as-of-right density, and increasing density when a housing element is included.

Other

Other portions of the Alewife area, including the Route 2 entryway, and the Triangle currently have zoning designations which permit housing. These designations provide the flexibility for new housing to be built should that be appropriate in the future.

The current zoning for the site is IC, which allows certain types of residential development within a PUD (Planned Unit Development). Further analysis as to the appropriateness of this designation will need to be done.

OUTSKIRTS OF STUDY AREA

Concord Avenue edge (east of Fresh Pond Parkway)

Another area that presents an opportunity for future housing development is the block bordered by Concord Avenue, Fern Street, Birch Street and Bay State Road/Field Street. This block sits adjacent to the Neighborhood Nine residential neighborhood and is located between the Tobin School/Father Callahan Field and Danehy Park. It is also far enough from Fresh Pond Parkway so that traffic noise is less intense.

The site is currently zoned Industry A-1 and allows housing along with a variety of light industrial, office and commercial uses. To promote future housing on this site, it is recommended that consideration be given to a zoning change to an appropriate residential designation. This will allow the existing light industrial use to continue but will ensure that any new development that occurs on the site is residential.

End of Harvey Street

At the western end of Harvey Street is a vacant site which is likely to be redeveloped. It is at the edge of the North Cambridge neighborhood and bordered by Russell Field Park. It is also very close to the Alewife T station.

ECONOMIC DEVELOPMENT

The Economic Development Implementation Plan addresses four major areas: 1) identification of industries strategically suited to the Alewife area, 2) preparation of a development plan which maintains an optimal mix of uses from research and development through manufacturing, 3) identification and deployment of financing tools to foster the development of the area, and 4) preparation and implementation of an arts master plan.

IDENTIFICATION OF STRATEGIC INDUSTRIES.

Alewife, and in particular the Alewife Quadrangle, appears to be a natural site for the expansion of the emerging technology industries that thrive in Cambridge. Located within easy reach of the city's academic research centers and offering an array of older industrial buildings favored by young emerging technology companies, Alewife could be positioned to capture the growth that will spill over from more central industrial areas such as East Cambridge and Cambridgeport. Firms such as Merlin (which manufactures titanium bicycle frames), the Virus Research Institute (a biotech company), and Hyperion Catalysis International (which manufactures carbon fiber) are harbingers of this trend. Specific strategies to identify these industries are:

❶ Commission a market analysis of regional growth trends in emerging technology industries to understand the potential demand and relative attractiveness of Cambridge in general, and Alewife in particular, in this arena.

❷ Target some questions in an upcoming Community Development Department survey of Cambridge research and development and manufacturing companies to assess the desirability of the Alewife Quadrangle.

Examples of technology based companies which may be a strategic fit for Alewife include biotechnology and life sciences, medical and scientific instrumentation/equipment manufacturing and repair, telecommunications, and specialty materials such as composites and ceramics.

PREPARE A DEVELOPMENT PLAN

A development plan will define and link the economic goals for the Quadrangle to the physical development of the area. Ongoing discussions with property and business owners will help define and develop the plan.

Economic goals for the Quadrangle include:

- ❶ define a development pattern that will meet the need of start-up companies for inexpensive space while offering the potential to expand within the Quadrangle as they grow;
- ❷ maintain a cost structure that allows for manufacturing to be performed on a portion of the land to meet the city's need for quality blue collar jobs;
- ❸ bring vacant and underutilized land into productive use to eliminate blight and support the tax base;
- ❹ integrate the development of the area into the City's job training plans to provide residents with quality jobs and companies with skilled workers.

Three predominant influences on the physical development of the Quadrangle will be land ownership, defining appropriate development patterns, and dealing with Chapter 21E issues on some of the sites:

❶ **Ownership.** The current ownership pattern includes small and mid-sized parcels. Development studies should be done to identify individually owned parcels suitable for development as well as assembling individual parcels for larger scale development. Public ownership or partnership should be explored as a way to stimulate investment and insure that the economic development goals are met.

❷ **Development pattern.** Emerging industries need space at a variety of rents to accommodate growth from start-up research and development to manufacturing. The development scenario for the Quadrangle should preserve older buildings which are suitable for re-use by early stage companies and older buildings which are appropriate for manufacturing. New buildings can be brought on line to meet the needs of firms as they mature financially and are able to pay higher rents for space.

The need for the development of an incubator in Alewife should be assessed. The incubator could provide inexpensive space for emerging companies where services such as darkrooms and fax machines are shared.

❸ **Chapter 21E Issues.** While some sites in the Quadrangle are clear of contamination and can be developed in their present state, others will require clean-up under the provisions of Mass. General Law Chapter 21E.

Available information on Alewife sites having 21E problems should be collected, and a strategy for cleaning or capping development sites should be developed.

FINANCING TOOLS

The development of the Quadrangle area will involve significant investment in infrastructure and real estate and will probably be accomplished through a mix of public and private resources. The list below includes a list of possible sources that should be explored.

❶ **121A Tax Agreements.** These tax agreements could be considered to provide a financial incentive for property owners planning to develop land for manufacturing. Requiring approval by the City Council and State, 121A agreements allow companies to reduce property taxes for a specified period of time. For example, Biogen in Kendall Square was recently approved for a 121 Agreement.

❷ **Tax Increment Financing.** Included in the state Economic Stimulus Package passed in 1993 and sponsored by Governor William Weld, this tool could finance the construction of infrastructure in the district. TIF is based on a plan agreed to by private property owners in an area that establishes a tax rate as a percentage of a base valuation for a period of up to 20 years after improvements are made. A municipality can levy betterment assessments on participating property owners to pay for improvements.

❸ **Economic Opportunity Area Designation (State).** Also included in the State Economic Stimulus Package, this designation is available to areas that meet poverty and unemployment guidelines. Provisions include a variety of tax incentives and real estate tax abatements.

❹ **Loan programs to finance space for emerging technology companies** including the Cambridge HUD 108 Biotechnology Loan Program and the State's Emerging Technology Fund should be marketed to companies interested in Alewife.

PUBLIC ART

The inclusion of a major public art program in development plans could give Alewife a unique sense of place which enhances the district as a place to work. This program could be implemented after development is substantially underway and a new sense of place is being established. Implementation steps include:

- ❶ Develop an arts master plan which could give Alewife a district identity and identify sites for installations.
- ❷ Identify funding. Funding sources that do not compete with economic development goals for the area should be identified.
- ❸ Hold competition and select artists. A national competition among artists who design works for public installation could be held to determine participating artists.

REGULATORY PLAN

Zoning can play an important role in directing change in Alewife. As with every other technique, however, that role is limited and must be used in concert with other tools to achieve the objectives for Alewife as outlined in this report.

REGULATORY OBJECTIVES

Among the general, district wide objectives which land use regulatory techniques might help to advance are the following:

Improve the level of environmental quality in the district

Whether directed simply at the appearance of the individual buildings in the district or more generally at a more rational organization of uses and development patterns throughout Alewife, zoning techniques can facilitate the transition of the area over time in ways that assure a more pleasing physical setting within which all kinds of uses can operate more effectively. These techniques include requiring conformance to a pre-determined urban design scheme, requiring greater amounts of landscaping and open space regulation of the layout of parking facilities on lots, some control over the appearance of buildings, greater public review of the specifics of site development, and more careful screening of the uses to be permitted. The desired results are to establish more open space through setbacks and landscaping even in industrial areas, reduce the clutter and visual chaos produced by on premise signs, particularly along Alewife Brook Parkway and Concord Turnpike, to control parking location so that it is not such a dominant visual feature from public roads, more integration of the existing open space reservations with adjacent development, and a greater respect for that open space when adjacent development is designed.

Improve the management of transportation services to the district

While vast numbers of cars travel through the district, 60 percent of them are not even destined for any place in Cambridge, never mind the Alewife district itself. Nevertheless that volume of traffic affects how the district will develop in the future and what impact that development will have on the residential communities potentially affected by future increases in car and truck traffic destined specifically for Alewife. The application of zoning techniques can address this issue quite directly in a number of ways: by directly controlling the amount of floor area that is permitted in the district, by regulating the kinds of uses that are allowed within the density envelope selected, and by imposing traffic mitigation measures as appropriate to limit the traffic impacts of authorized additional development. Other measures which could improve traffic and transportation management in the district, such as specific roadway improvements, must be addressed directly through other techniques. A goal of this Master Plan is to encourage alternate means of travel other than the single occupancy automobile, both in getting to Alewife and in travelling within the district during the business day. In part these objectives might be advanced through modified requirements for the provision of accessory parking, through requirements to develop and/or participate in traffic mitigation measures within the district and through a better mix of uses which could service the needs of employees throughout the working day without resorting to use of the automobile. However, substantial reductions in the amount of development permitted has not generally been the choice in addressing this issue.

Encourage a better mix of uses

Of all aspects of development, the control of uses is perhaps most directly addressed through the use of zoning regulatory tools. Zoning, however, cannot ensure a particular result in this regard. If a market does not exist, zoning cannot mandate the appearance of a use (for example retail activity where there are not enough people to support the activity). However, the technique can most directly prohibit undesirable uses and can allow desired uses which can then appear in response to market conditions. The zoning ordinance could also provide certain incentives to make a desired use more financially feasible. Economic development objectives of this Plan include increasing the ease with which research and development and manufacturing uses might be established in the district. Additional recommendations of the Plan are the introduction of accessory retail in the major industrial and office districts, and the continued opportunity to build housing in limited portions of Alewife.

Increase the amount of open space

Zoning can mandate a certain percentage of open space on a developed lot. In addition, where large parcels are being developed to multiple buildings, flexibility in the dimensional limits imposed by zoning might permit the creation of a sizable open space or park on a lot through the shifting of development potential to other locations on that development parcel. In this way, a greater presence of open space and a better linkage between open space and pedestrian paths throughout the district can be encouraged.

GENERAL ZONING APPROACHES

To achieve the above objectives a number of general approaches have been proposed:

Base zoning

In general the existing base zoning districts are to remain, with their current mix of uses and dimensional limits intact. The one major exception to that general rule might be an alternate for the Business C District where more public review of development approaching the maximum allowed under that district is desirable. In the Quadrangle, some adjustment in the Office 2 District/Industry B-2 District boundary line makes sense to give added emphasis to the desire to encourage industrial and Research and Development uses.

PUD 5 Zone

The Planned Unit Development (PUD) 5 zone, which is an overlay district for the Office 2 District present in the Triangle, should be eliminated as its provisions are obsolete and ineffective in achieving the PUD's own stated objectives or those outlined in this report for that area.

Overlay Districts

The existing Parkway Overlay District, which currently runs as a thin, regulatory band along the Concord Turnpike, Alewife Brook Parkway, and Concord Avenue, should be eliminated in favor of a more comprehensive Overlay District covering most of the Alewife study area. Specific objectives for the edge currently covered in the overlay districts would be included in the new overlay district. Through this new Overlay District the following would be achieved.

- ❶ An urban design plan would be referenced and its provisions used as a guide where development within the Overlay District occurred as of right, and as a requirement where a variance or special permit were required to permit a development scheme to proceed.
- ❷ An expanded range of uses would be permitted: limited industrial use would be permitted in Office 2 Districts; accessory retail would be permitted in office districts and in the Industry B-2 district.
- ❸ Open space would be required for most new developments, not simply for residential development as is now the case.
- ❹ Parking would be regulated so as to favor specific uses, such as manufacturing and accessory retail, which require fewer employees or customers arriving by automobile. Parking should be tied to land area rather than building area.
- ❺ A special permit requirement might be instituted for larger scaled developments with design review and traffic mitigation being two requirements that could be a part of the approval of such special permits.

⑥ Greater flexibility should be introduced, through transfer of development rights or other mechanisms, which would permit development of sites or combinations of sites in a manner consistent with the urban design plan.

SPECIFIC ZONING OBJECTIVES, BY AREA

Route 2/Alewife Reservation Area

The development of this area is particularly critical as it borders one of the major vehicular entries into the city (Route 2/the Concord Turnpike) as well as the MDC's Alewife Reservation, one of the largest open spaces in Alewife and one of the area's most unique features. A major objective here is to improve the image of the area visually by permitting expansion of the office and research and development uses which currently predominate and to encourage the phasing out of the destination retail uses which dominate the Route 2 frontage at the Belmont town line. To advance those objectives the following zoning techniques are suggested.

- ① The Office 2 designation is retained, which allows the office, research and development, and hotel uses desired.
- ② Limited accessory retail uses would be introduced.
- ③ Special setbacks as exist would continue to be required from Concord Turnpike. Setbacks from the Little River would also be required; legislation currently under review in the State Legislature might address this issue most appropriately.
- ④ Flexibility in dimensional regulations would be permitted to make possible redevelopment of the retail sites in conformance with the urban design objectives of the area, i.e. improved landscaping and installation of a frontage service road.

The Triangle

Retention of the predominant office and R and D uses in this area is anticipated, but with the introduction of accessory retail activity on the ground floor of buildings fronting on Cambridgepark Drive. Better pedestrian connections between the development in this district, the adjacent MDC Alewife Reservation, the Fresh Pond Shopping Center, and the Quadrangle are desired. Significant additional development should be tied to implementation of, or participation in, traffic mitigation measures. The following is proposed.

- ① Retention of the existing Office 2 designation but elimination of the PUD 5 district.
- ② The new Overlay District would be utilized to incorporate some of the more desirable features of the old PUD 5 district including:
 - Introduction of accessory retail as a permitted use.
 - Special provisions to waive certain setback requirements, to increase height, and to permit joint development of lots in order to secure the urban design objectives outlined for this area, particularly including the strengthening of the pedestrian quality of the street frontage along Cambridgepark Drive.

The Quadrangle

This is the portion of the Alewife District where light manufacturing is particularly to be encouraged. It is an area with a confusing and, in some cases, unattractive appearance; a significant upgrade of the visual quality of this area is desired. In addition, this is the area in Alewife that directly abuts a small scale residential neighborhood; particular attention must be paid to ensuring an adequate buffer or transition between that neighborhood and the nonresidential development in the Quadrangle. The following regulatory directions should be taken:

- ❶ The existing Office 2 District and Industry B-2 District will be retained. Some modifications to their mutual boundary may be considered.
- ❷ Special transition requirements between those two districts and the abutting residential neighborhood will be incorporated into the new Overlay District. Those special provisions will be removed from base districts where they are currently located.
- ❸ Setbacks will be required, landscaping requirements for those setbacks will be introduced, and parking will be specifically required to be screened from view in order to significantly improve the visual aspects of the area.
- ❹ Flexibility in development options, including transfer of development potential between lots, should be introduced to enable private development the opportunity to provide some of the desired urban design objectives, including the provision of a rational system of roadways, new parks, and a series of pedestrian ways throughout the area.

- ❺ Accessory retail uses would be introduced as would light manufacturing as a permitted use in the Office 2 District. Consideration might be given to providing incentives to encourage the inclusion of manufacturing in new developments.

The Fresh Pond Commercial Area

This area is expected to remain principally a retail shopping district. It is, however, viewed as clearly substandard from a visual environmental perspective and a major improvement in that aspect of the area, which brackets a major entry highway into Cambridge, is a prime objective of the Plan. This is the one area where a clear reduction in the as-of-right development density potential is advisable as there are significant traffic implications if large new additions to the retail activities of the area were to occur in the future. The following approaches should be considered.

- ❶ Substitution of the Business C zoning designation by an alternate district which would reduce the amount of as-of-right development permitted, perhaps by half. Consideration could be given to increasing the as-of-right density by special permit provided effective traffic mitigation measures were adopted. Increased density may also be permitted if housing were a component of any new development, also by special permit or through a design review process.
- ❷ Flexible development techniques, including transfer of development rights should be considered to encourage redevelopment that could improve the visual aspects of the current strip retail development along Alewife Brook Parkway.

PROCESS FOR DESIGN REVIEW IN THE “NEW OVERLAY DISTRICT”

The process is based upon the successful aspects of the Parkway Overlay District which dates from 1980, in which projects requiring Special Permits follow the Development Consultation Procedure for Large Projects outlined in the Zoning Ordinance. This entails a public hearing at the Planning Board, with review by the Board and staff and with public commentary taken into consideration as the decision is rendered.

There is a hierarchy of subdistricts:

❶ Level #1: Major Ways, i.e. Parkways/Concord Avenue. Compliance with the most detailed guidelines is required for projects of 20, 000 square feet or more on every property that abuts major ways.

❷ Level #2: Secondary Ways, e.g. Smith Place, Moulton Street, Spinelli Place, Cambridgepark Drive. Compliance with a less detailed set of guidelines is required for projects of 50,000 square feet or more on every property that abuts secondary ways.

❸ Level #3: Tertiary Ways, i.e. sites in the interior portions of Alewife and not visible from the major ways. Here, guidelines treat only the most basic features, such as height and setbacks that have an effect on nearby major or secondary ways.

PHASING

Implementation of the Alewife Master Plan recommendations will begin once the plan has been accepted by the Cambridge City Council. Phasing of many of the implementation measures described in this report, such as roadway improvements, bicycle paths, and new open space, will be affected by the availability of both public and private financing needed to develop public/private partnerships and construct infrastructure. Progress on other measures, such as development of design guidelines, short-term improvements to the entryway and further development of transportation management strategies, can be made more quickly.

SHORT-TERM IMPLEMENTATION PLAN

The following is a list of the implementation strategies that the city will pursue in the short-term:

Open Space

- ❶ Work with the City's Fresh Pond Management Group on landscape improvements to the edge of the Reservation.
- ❷ Develop zoning mechanisms, including transfer of development rights, and urban design guidelines for new open space in Alewife.

Transportation

- ❶ Roadways: Among the proposed roadway improvements, highest priority should be given to reconstruction of Concord Avenue And the Smith Place/Concord Avenue intersection.

- ❷ Transit Improvements: With the MBTA, further develop the feeder bus network to Alewife stations. Play an advocacy and planning role to promote the Commuter Rail Station.

- ❸ Transportation Demand Management: Work with Alewife businesses to develop a Transportation Management Organization (TMO).

- ❹ Bicycle Network: Design proposed bicycle connections/paths in Alewife, particularly a link to the newly constructed Minuteman Bikeway, working with public agencies including the Central Transportation Planning Staff (CTPS), Massachusetts Highway Department, and MBTA, as well as the adjacent towns of Arlington, Belmont, and Somerville.

Housing

- ❶ Investigate sites on the outskirts of the study area to determine the feasibility of future housing at these locations.

Economic Development

- ❶ Identify and outreach to specific industries strategically suited to Alewife.
- ❷ Prepare a development plan for the Alewife Quadrangle that is site specific. This analysis will show site parcelization, type of development desired and site constraints and opportunities. The development plan will assist in matching new businesses, particularly those that are R & D and manufacturing-oriented, to site opportunities in Alewife.

Regulatory

- ❶ Develop zoning amendments and detailed urban design guidelines.

